

## NAT I Engineering Chemistry

Sr	Questions	Answers Choice
1	Inter molecular forces in solid hydrogen are	<p>A. <span style="font-size: 14.44444465637207px;">Covalent forces</span></p> <p>B. <span style="font-size: 14.44444465637207px;">Van der Waal forces or London dispersion force</span></p> <p>C. <span style="font-size: 14.44444465637207px;">Hydrogen bonds</span></p> <p>D. <span style="font-size: 14.44444465637207px;">All of these</span></p>
2	The structure of XeF <sub>6</sub>	<p>A. Distorted octahedral</p> <p>B. Pyramidal</p> <p>C. Tetrahedral</p> <p>D. None of the above</p>
3	The number of atoms contained in 11.2 L of SO <sub>2</sub> at S.T.P are	<p>A. <math>3/2 \times 6.02 \times 10^{23}</math></p> <p>B. <math>2 \times 6.02 \times 10^{23}</math></p> <p>C. <math>6.02 \times 10^{23}</math></p> <p>D. <math>4 \times 6.02 \times 10^{23}</math></p>
4	Tollen's reagent is	<p>A. Ammonical cuprous chloride</p> <p>B. Ammonical cuprous oxide</p> <p>C. Ammonical silver bromide</p> <p>D. Ammonical silver nitrate</p>
5	The formula of nitre is	<p>A. KNO<sub>3</sub></p> <p>B. NaNO<sub>3</sub></p> <p>C. NaCl</p> <p>D. Na<sub>2</sub>CO<sub>3</sub></p>
6	Which of the following has greatest tendency to lose electron?	<p>A. F</p> <p>B. Fr</p> <p>C. S</p> <p>D. Be</p>
7	Which one is the property of an ideal solvent	<p>A. Should be expensive</p> <p>B. It should react chemically with the solute</p> <p>C. Impurities should crystallize along with the solute</p> <p>D. Should be safe to use</p>
8	Ammonia gas used directly as a fertilizer is injected into the soil at a depth of about	<p>A. <span style="font-size: 14.44444465637207px;">Two inches</span></p> <p>B. <span style="font-size: 14.44444465637207px;">Three inches</span></p> <p>C. <span style="font-size: 14.44444465637207px;">Five inches</span></p> <p>D. <span style="font-size: 14.44444465637207px;">Six inches</span></p>
9	When sulphur is boiled with Na <sub>2</sub> SO <sub>3</sub> solution the compound formed is	<p>A. Sodium sulphides</p> <p>B. Sodium sulphates</p> <p>C. Sodium persulphate</p> <p>D. Sodium thiosulphate</p>
10	In a crystal $a \neq b \neq c$ , $\alpha = \gamma = 90^\circ$ and $\beta \neq 90^\circ$ , it is	<p>A. Monoclinic</p> <p>B. Rhombic</p> <p>C. Trigonal</p> <p>D. Tetragonal</p>
11	Bromine is obtained on a commercial scale from	<p>A. Caliche</p> <p>B. Carnallite</p> <p>C. Common salt</p> <p>D. Cryolite</p>

A. Covalent bond

12	Hydrogen chloride molecule contains	B. Double bond C. Co-ordinate bond D. Electrovalent bond
13	The formula of calcium cyanamide is	A. $\text{Ca}(\text{CN})_2$ B. $\text{CaC}_2\text{N}$ C. $\text{CaNCN}$ D. $\text{CaCHNH}_2$
14	Which of the following process is used to separate insoluble particles from liquids?	A. Separation B. Filtration C. Crystallization D. Condensation
15	The relative rate of diffusion of a gas (molecular weight - 128) as compared to oxygen is	A. 2 times B. $\frac{1}{4}$ C. $\frac{1}{8}$ D. $\frac{1}{2}$
16	Which one is not usually used for the crystallization	A. Acetone B. Acetic acid C. Sulphuric acid D. Chloroform
17	The maximum number of electrons in a subshell for which $l = 3$ is	A. 14 B. 10 C. 8 D. 4
18	How many moles of Helium gas occupy 22.4 L at $0^\circ\text{C}$ at 1 atm. Pressure?	A. 0.11 B. 0.90 C. 1.0 D. 1.11
19	The essential component of organic compound is	A. O B. C C. P D. N
20	The wire in the flash bulbs is made up of	A. Mg B. Ba C. Cu D. Ag